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09/538,602	03/29/2000	Brian P. Dougherty	4562 US	6189
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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			DEMICO, MATTHEW R	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/538,602	<b>Applicant(s)</b> DOUGHERTY ET AL.	
	<b>Examiner</b> Matthew R Demicco	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-24, 26-35 and 39-47 is/are rejected.
- 7) ☐ Claim(s) 25 and 36-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040715</u> . | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Response to Amendment***

1. This action is responsive to an amendment filed 11/08/2004. Claims 1-14 and 16-47 are pending. Claims 10-11, 14, 16-23 27-37 and 39-46 are amended. Claim 15 is cancelled. The objection to Figure 8 is withdrawn in light of the amendment. The objection to Figure 2 stands. The objections to the specification are withdrawn in light of the amendment.

***Response to Arguments***

2. Applicant's arguments filed with respect to Claims 1, 10-12, 14 and 45-46 have been fully considered but they are not persuasive. Regarding these claims, Applicant argues that, "Hidary provides a time at which the URL is communicated with the video but not a timing offset." Applicant further states that nowhere in Hidary is the concept of a timing offset mentioned or even suggested. Claim 1 recites "a timing offset relative to the start of the broadcast program". The American Heritage Dictionary, 4<sup>th</sup> Edition defines "offset" as "The start or initial stage; the outset." Because the time code of Hidary defines the *start* of the presentation of the interactive application object, and this starting point is *relative* to the start of the broadcast program (i.e.: they are inter-related as they share the same timeframe), the time code of Hidary reads on the claimed timing offset. In short, a time that defines the start of an event is a timing offset in the broadest reasonable interpretation, regardless of whether the specified time is given in absolute time or not.

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***Claim Rejections - 35 USC § 102***

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-11, 14, 16-24, 28-35 and 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,774,664 to Hidary et al.

Regarding Claim 1, Hidary discloses a computer-implemented method of controlling the reception of an interactive application (web page) comprising the use of a scheduling calendar (electronic program guide) to allocate time periods for transmitting Internet URLs coinciding with television programming (Cols. 5-6, Lines 66-8). This scheduled reads on the claimed determining, using an electronic program guide, a timing offset (Col. 6, Lines 18-29) object comprising a time code which allows web pages to be synchronized to a particular frame of the video (Col. 8, Lines 59-60). This reads on the claimed timing offset relative to the start of the broadcast program. The URL reads on the claimed interactive application object. As is well known in the art, a URL consists of a protocol section (such as HTTP, FTP, Telnet, etc.), an address, a resource, and an action or parameter to pass to the resource. The URL therefore initiates an action based on the parameters. This reads on the claimed action to take with regards to the interactive application. The Web page is retrieved and displayed in synchronization with the video content (Col. 7, Lines 21-29). This reads on the claimed performing the action of the

interactive application object at the timing offset to maintain synchrony of the interactive application with the display of the broadcast program.

Regarding Claim 2, Hidary discloses a method as stated above in Claim 1 wherein Internet web pages are synchronized to video content as stated above using a database schedule. Each program has specific web pages associated with it (Col. 8, Lines 39-42). Therefore, it is inherent that in addition to the timing information of the broadcast program, the channel information must be provided in order to properly synchronize the relevant web pages to the proper channels of programming. This reads on the claimed providing of timing information of the program and channel information of the broadcast program as inputs to the electronic program guide to determine the broadcast program. A timing offset object associated with the determined broadcast program is determined in order to sync and display appropriate web content for the show that is being watched.

Regarding Claim 4, Hidary discloses a method as stated above in Claim 1 wherein the action to take is displaying a web page as stated above. This reads on the claimed triggering or starting the interactive application.

Regarding Claim 5, Hidary discloses a method as stated above in Claim 1 wherein the interactive application is an Internet web page. This reads on the claimed interactive content.

Regarding Claim 6, Hidary discloses a method as stated above in Claim 1 wherein the interactive application object is a URL. This reads on the claimed identifier of interactive content. As is well known in the art, a URL is used to identify a protocol, host and resource to connect to in order to receive data. This reads on the claimed performing

the action on the interactive application object comprising determining from the identifier the interactive application object it identifies and performing the action on the identified object.

Regarding Claims 7-8, Hidary discloses a method as stated above in Claim 6 wherein the identifier is a URL. This reads on the claimed pointer to a network source for interactive content.

Regarding Claim 9, Hidary discloses a method as stated above in Claim 1 wherein the interactive application object is a URL as stated above and performing the action further comprises retrieving interactive content from a server on the Internet referenced by the URL as is well known in the art and displaying the content as stated above. This displaying reads on the claimed performing the action on the retrieved interactive content.

Regarding Claim 10, Hidary discloses a system for referencing an electronic program guide to facilitate the control of the reception of an interactive application as stated above comprising an application server (Col. 5, Lines 34-46) for determining from the scheduling calendar (Col. 5, Lines 66-67) a URL for transmission to users. As stated above, time and channel data are required to properly match the URL to the programming content. This reads on the claimed determining from the program guide a program based on time and channel information. A timing offset associated with the broadcast problem is disclosed as stated above in Claim 1. Based on the broadcast program, a URL is delivered to the user with the timing offset. This URL, as stated above, dictates an action to take to retrieve and provide interactive content coordinated with the broadcast

program. As is well known in the art, the receiving equipment uses the URL to request interactive content, which is then delivered. Further disclosed is customer premise equipment (Col. 5, Lines 7-20) coupled to the application server (See Figure 2) for receiving and displaying the content based on the timing offset as stated above.

Regarding Claim 11, see Claim 10 above. Hidary discloses a method wherein the client system handles the processing of the URL from the video stream without the use of an intermediate server (Col. 5, Lines 22-33).

Regarding Claim 14, Hidary discloses a computer implemented method of controlling the broadcast and reception of an interactive application comprising determining, using and electronic program guide, a web site associated with a broadcast program as stated above. This web site reads on the claimed interactive application. Further disclosed is controlling the web site to maintain synchrony with the display of the broadcast program as stated above. A timing offset associated with the broadcast program is determined and the interactive application is controlled to maintain synchrony with the display of the broadcast program in accordance with the timing offset as stated above.

Regarding Claim 16, Hidary discloses a method as stated above in Claim 14 wherein a URL is associated with a program in the program schedule as stated above. This URL reads on the claimed program identifier. The URL points to a web page (interactive application) associated with the broadcast program as stated above.

Regarding Claim 17, Hidary discloses a method as stated above in Claim 14 wherein determining, using the program schedule, an interactive application associated with a broadcast program comprises determining, from the schedule, an identifier as

stated above. The identifier is a URL. The URL is used to determine an interactive application (web page) associated with the program as stated above.

Regarding Claim 18, see Claim 17 above. The URL provides an identifier of a web page resource on the Internet. The receiver then uses the web page resource identifier to locate and retrieve the web page. This reads on the claimed determining from the identifier of the interactive application, an interactive application associated with the broadcast program.

Regarding Claim 19, see Claim 18 above.

Regarding Claim 20, see Claim 19 above.

Regarding Claim 21 and 22, see Claim 18 above.

Regarding Claim 23, Hidary discloses a method as stated above in Claim 14 wherein the timing offset data may be transmitted to the user from an Internet server instead of being embedded in the television programming (Col. 5, Lines 34-46). This reads on the claimed receiving timing offsets associated with the broadcast program from an external source.

Regarding Claim 24, Hidary discloses a method as stated above in Claim 23 wherein the external source is a remote server as stated above and receiving the timing offsets comprise accessing the remote server via the Internet and downloading the timing offsets as stated above.

Regarding Claims 28 and 29, Hidary discloses a method as stated above in Claim 14 wherein determining timing offsets associated with the broadcast program comprises receiving a URL constructed from data in the program schedule as stated above. The



URL reads on the claimed program identifier and contains timing offset data (Col. 6, Lines 18-19) associated with the broadcast program.

Regarding Claim 30 see Claims 28 and 29 above. Further, a URL, as stated above, contains an identifier of an interactive application associated with the program, which includes timing data as stated above. This reads on the claimed determining from the identifier of the interactive application, timing offsets associated with the broadcast program.

Regarding Claim 31-34, see Claims 28-30 above.

Regarding Claim 35, Hidary discloses a method as stated above in Claim 14 wherein the broadcast program is a television show (Col. 1, Lines 65-66). Hidary further discloses determining from the timing offset that a web page is to be displayed at a time relative to the beginning of the television show as stated above. It is inherent that an internal command is generated to execute the retrieval and display of the web page at the given time.

Regarding Claim 42, Hidary discloses a method as stated above in Claim 14. As stated above, the scheduling database is stored on a server. This reads on the claimed method wherein the electronic program guide resides primarily on a server remote from a viewer's own equipment.

Regarding Claim 43, Hidary discloses a method as stated above in Claim 14. Hidary further discloses that the customer equipment is enabled to run a web browser (Col. 7, Lines 11-14). This reads on the claimed interactive application being run at least primarily on a viewer's own equipment.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 12-13, 26-27, 39, 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary et al.

Regarding Claim 3, Hidary discloses a method as stated above in Claim 1. Hidary further discloses providing timing information and channel information of the broadcast program as inputs to the program guide to determine the broadcast program and determining a timing offset associated with the program as stated above in Claim 3. Hidary further discloses a network broadcaster developing a master schedule for use with various affiliates (Col. 6, Lines 52-54). What is not disclosed, however, is providing location information of the broadcaster of the broadcast program. Official Notice is hereby taken that it is well known in the art to provide location information of the broadcaster in a program guide such that client devices are enabled to filter out and receive only data relevant to the broadcaster/broadcast area to which they belong. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the broadcaster location of the well-known prior art in order to enable the receivers to filter out only channels and data being carried by their local affiliates from the master schedule.

Regarding Claim 12, Hidary discloses a system for facilitating the control of the reception of an interactive application comprising an electronic program guide for receiving time and channel information as inputs and outputting an identifier of a broadcast program as stated above. Further disclosed is a server that provided the link file records including the URLs to the user's computer (Col. 6, Lines 32-41). This local or distributed network of servers reads on the claimed timing offsets database for receiving the identifier of the broadcast program output by the electronic program guide as input and outputting a URL. The URL includes an identifier of the interactive content, an action to take on the identified interactive content and a time at which to take the action (Col. 6, Lines 18-19). Further disclosed is user equipment as stated above for receiving the URL and retrieving and displaying the interactive content referenced by the URL with the broadcast program being displayed at the time and on the channel as stated above. This reads on the claimed "interactive content database".

Regarding Claim 13, Hidary discloses a method as stated above in Claim 12 wherein the output interactive content is a URL identifying a location on a server on the Internet from which the interactive content can be retrieved as stated above.

Regarding Claim 26, Hidary discloses a method as stated above in Claim 23 wherein the timing data may originate from a network broadcaster (Col. 6, Lines 42-49) for various affiliates. The timing offsets are embedded in the VBI of the broadcast program (Col. 5, Lines 34-39). It would be obvious to one having ordinary skill in the art that the network broadcaster may be a national broadcaster.

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Regarding Claim 27, Hidary discloses a method as stated above in Claim 14.

What is not disclosed is that timing offsets associated with the broadcast program are determined from the interactive application. Official Notice is hereby taken that it is well known in the art that a web page may include a meta tag specifying a timing offset in which to refresh content on the same, or a different page (meta-redirect). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the interactive application-based timing offsets in order to allow one web site to reference another after a predetermined timing offset in order to establish a timed "chain" of events without relying on embedding each timing command in the VBI.

Regarding Claim 39, Hidary discloses a method as stated above in Claim 14. As stated above, timing, channel and location of the broadcaster information are determined for the broadcast program and used as inputs to the program guide to determining an interactive application as stated above.

Regarding Claim 41, Hidary discloses a method as stated above in Claim 14. What is not disclosed is that the program guide resides at least primarily on a viewer's own consumer premise equipment. Official Notice is hereby taken that it is well known in the art to store several days or weeks worth of EPG data on a user's terminal. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hidary with the local storage of the well-known prior art in order to increase the speed of access of the scheduling data.

Regarding Claim 44, Hidary discloses a method as stated above in Claim 14.

What is not disclosed, however, is that the interactive application is run primarily on a server remote from a viewer's own equipment. Official Notice is hereby taken that it is well known in the art to run an application on a remote server and feed only basic video and I/O to a client side. Such systems include remote access systems such as X11 and Citrix. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the remote access of the well-known prior art in order to reduce cost by providing user equipment with reduced capabilities run from a single powerful server.

7. Claims 40 and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary et al. in view of U.S. Patent No. 6,415,438 to Blackketter et al.

Regarding claim 40, Hidary discloses a method as stated above in Claim 14.

Further disclosed are executing commands from an interactive server based on timing offsets as stated above including commands to schedule and start the display of a web page. What is not disclosed, however, are commands to stop and cancel interactive applications for the broadcast program associated with the timing offsets at corresponding times determined by the timing offsets. Blackketter discloses an interactive television trigger having a time attribute (See Abstract) that includes a life span attribute (Col. 8, Lines 15-38). Blackketter is evidence that ordinary workers in the art would recognize the benefits of stopping or canceling an interactive application at a certain timing offset. Therefore, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to modify the method of Hidary with the life span attribute of Blackketter in order to limit the time certain applications are displayed on the screen to allow time for other applications to be displayed and to allow a higher level of control over the user's display.

Regarding Claim 45, Hidary discloses a computer-implemented method of controlling the reception of at least one interactive application (web page). Hidary further discloses using an electronic program guide (schedule database) to determine a list of interactive applications associated with a broadcast program, the interactive applications being associated with at least one timing offset as stated above. Hidary further discloses inserting the interactive applications into the broadcast stream in response to the timing offset as stated above. What is not disclosed, however, is pre-fetching the listed interactive applications and storing the pre-fetched interactive applications. Blackketter discloses a system as stated above wherein a receiver is operable to pre-fetch information resources so that they are available at the future time the trigger is to be executed (Col. 3, Lines 2-5). Further, it is inherent that the data must be stored once it is pre-fetched, in order to be available at a later time. Blackketter is evidence that ordinary workers in the art would recognize the benefits of pre-fetching and storing data for later use. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the pre-fetching of Blackketter in order to instantly display the interactive data when the trigger is enabled. What Hidary in view of Blackketter do not disclose, however, is that the interactive application is inserted into the broadcast stream in response to the trigger. Hidary discloses that the

URL data may be embedded in the television program stream. Official Notice is hereby taken that it is well known in the art to transmit additional data including interactive applications in the broadcast stream. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary in view of Blackketter with the in-band data transmission of the well-known prior art in order to enable a user to receive interactive applications even if they do not have a costly secondary connection to the Internet.

Regarding Claim 46, Hidary discloses a computer-implemented method of controlling the reception of at least one interactive application. Hidary further discloses determining at a consumer's premise equipment, using an electronic program guide, a list of interactive applications associated with a broadcast program as stated above. Hidary also discloses receiving a trigger for one of the fetched applications and displaying the application in response to the trigger and the timing offset as stated above. What is not disclosed, however, is pre-fetching the listed interactive application and the timing offset and storing them in a storage device coupled to the CPE. Blackketter discloses a system as stated above wherein a receiver is operable to pre-fetch information resources so that they are available at the future time the trigger is to be executed (Col. 3, Lines 2-5).

Further, it is inherent that the data must be stored once it is pre-fetched, in order to be available at a later time. Blackketter is evidence that ordinary workers in the art would recognize the benefits of pre-fetching and storing data for later use. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to modify the method of Hidary with the pre-fetching of Blackketter in order to instantly display the interactive data when the trigger is enabled.

Regarding Claim 47, Hidary in view of Blackketter disclose a method as stated above in Claim 45. Hidary further discloses that the trigger may be received via the VBI of the broadcast stream (Col. 4, Lines 40-47).

***Allowable Subject Matter***

8. Claims 25 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R Demicco whose telephone number is (571) 272-7293.

The examiner can normally be reached on Mon-Fri, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRD

mrdr

April 1, 2005

  
CHRIS GRANT  
PRIMARY EXAMINER